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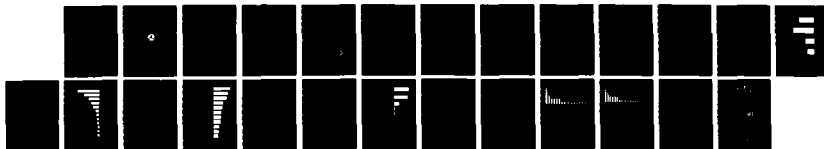
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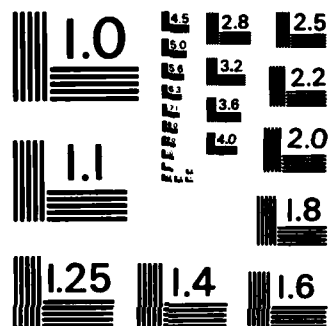
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CHARACTERISTICS OF MEDICALLY DISQUALIFIED AIRMAN APPLICANTS
IN CALENDAR YEARS 1982 AND 1983

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16. Abstract <p>This study presents comprehensive data reflecting pertinent denial rates with respect to the medical and general attributes of those airmen denied medical certification in calendar years 1982 and 1983. The study updates previously reported data with respect to medical certification denials.</p> <p>The denial data were obtained from computer files as of July 1, 1983, for calendar year (CY) 1982 applicants and July 1, 1984, for CY 1983 applicants. The data were summed for the 2 calendar years to provide a larger group for comparison with the December 31, 1982, active airman population, the midpoint population date for the denied applicant group.</p> <p>The annual denial rate based on airman applicants is 6.2 per 1,000 airmen. By class of certificate applied for, the annual denial rate per 1,000 applicants is 3.3 for first class, 3.8 for second class, and 8.6 for third class. As anticipated, general aviation and new applicants contribute greatly to total denials. The most significant causes for denial (regardless of class applied for) are cardiovascular, the miscellaneous pathology category (endocrinopathies, disqualifying medications, and administrative denials), neuropsychiatric, and, at a substantially lower level, eye pathology.</p> <p>The updated data on medically disqualified applicants are consistent with expectations and previous findings, with cardiovascular diseases still the number one cause for denial. ←</p>			
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**CHARACTERISTICS OF MEDICALLY DISQUALIFIED AIRMAN APPLICANTS
IN CALENDAR YEARS 1982 AND 1983**

INTRODUCTION

The Federal Aviation Administration (FAA) and its predecessors have been charged with the responsibility for medical certification of all United States and some international civil airmen since 1927. Each airman must hold a current medical certificate of the appropriate class to validate any pilot certificate(s) he or she may possess. Federal Aviation Regulations require that physical examinations be performed at 6-month intervals for air transport pilots, annually for other commercial pilots, and at 2-year intervals for private or student pilots. Different medical standards apply to the different categories of medical certification. If the medical standards are not met, the application is denied. This denial can result from any of several levels of certification review, from the aviation medical examiner (AME) to the Federal Air Surgeon.

Federal Aviation Regulations, Part 67, specify that a medical certificate will be denied if an applicant has an established medical history or clinical diagnosis of any of the following conditions:

1. A personality disorder that is severe enough to have repeatedly manifested itself by overt acts.
2. A psychosis.
3. Alcoholism, unless there is established clinical evidence, satisfactory to the Federal Air Surgeon, of recovery, including sustained total abstinence from alcohol for not less than the preceding 2 years. "Alcoholism" means a condition in which a person's intake of alcohol is great enough to damage physical health or personal or social functioning, or when alcohol has become a prerequisite to normal functioning.
4. Drug dependence.
5. Epilepsy.
6. A disturbance of consciousness without satisfactory medical explanation of the cause.
7. Myocardial infarction.
8. Angina pectoris.
9. Coronary heart disease that has required treatment or, if untreated, that has been symptomatic or clinically significant.
10. Diabetes mellitus, requiring insulin or other hypoglycemic drug for control.

Medical certification criteria have changed dramatically in favor of the airman during recent years as a result of the evolution of aviation medicine and increased efforts in the area of aeromedical research. A primary function of the Civil Aeromedical Institute (CAMI) is to identify and provide substantive data in support of current medical criteria in the furtherance of aviation safety, as well as provide a better service to the airman. During recent years, for example, standards have been relaxed with respect to contact lens use and medication allowed for control of hypertension.

This study provides comprehensive data reflecting pertinent denial rates with respect to the medical and general attributes of those airmen denied medical certification in calendar years 1982 and 1983.

METHODS AND SOURCE

The Aeromedical Certification Branch (AMCB) of CAMI is the central screening facility and repository within the FAA for collection, processing, adjudication, investigation, and analyses of medical data generated by the aeromedical certification and related regulatory programs.

The AMCB's computerized medical records provide historical data for both daily screening of document input and epidemiologic/research purposes. This computer file contains the most recently submitted medical applications for pilots, whether the certificate is issued or denied, or the case is pending. These automated medical record files provided the source data for the study.

Physical examinations to detect medical conditions that could incapacitate a pilot or otherwise adversely affect pilot performance are given by designated AME's, most of whom are physicians in private practice. Military applicants receive their examinations at designated military facilities. Reports of these examinations from throughout the world are forwarded to the AMCB in Oklahoma City for processing.

Data presented are descriptive in nature, and appropriate population comparisons are made via conventional statistical methodology where compatible data exist and statistical treatment would be meaningful.

In many areas, accuracy of data is contingent on the completeness and accuracy of information supplied by the airman applicant. Other data are coded by AMCB personnel. Some human error is recognized but is not considered significant enough to seriously bias the data provided in this study.

Some airmen who hold first-class certificates will have applied for medical certification four times during the 2-year period, some airmen who hold second-class certificates will have applied twice, and airmen with third-class certificates will have applied once. However, rate data are provided for the number of applicants versus the number of applications. The active file provides applicant data because it contains only the most recent examination of an airman. Both the denial data and the population data are maintained on the active file.

The cause for denial is determined by the presence of an alpha prefix to a specific pathology code. The prefix and code are assigned by medical record technicians in the AMCB. Internal computer edits ensure logical assignment of such prefixes and pathology codes. These edits are applied when initial file maintenance to an airman's record is made and again at the end of each quarter to eliminate discrepancies in pathology and denial data on the active file. Data presented regarding pathology represent conditions cited as cause for denial, not applicants. Some airmen denied medical certification for legal or administrative reasons or for failure to provide additional medical information would not necessarily have a pathology code assigned. There are also airmen who are denied for more than one cause.

The denial data were obtained from computer files as of July 1, 1983, for calendar year (CY) 1982 applicants and July 1, 1984, for CY 1983 applicants. The 6-month time lapse was allowed to ensure that final certification action had been taken in the majority of cases. The data were summed for the 2 calendar years to provide a larger group for comparison with the active airman population.

The active airman population as of December 31, 1982, was used as the midpoint population base for rate computation. A medically certified airman is considered "active" for a maximum of 24 calendar months following the most recent FAA medical examination; i.e., regardless of the class of medical certificate issued, it is valid for third-class purposes for 24 months unless otherwise limited or recalled by the FAA.

Data from the most recent medical record were selected and extracted from the active file. Annual rates were computed to provide data more useful for answering the many questions received concerning airmen denied medical certification.

FINDINGS AND DISCUSSION

A. General Comments

As of December 31, 1982, there were 732,514 active airmen in our automated system; 101,296 held first-class medical certificates, 253,509 held second-class certificates, and 377,709 held third-class certificates. In CY 1982 and 1983, 9,100 airmen were denied medical certification. The annual denial rate based on active airmen is, therefore, 6.2 per 1,000 (see Figure 1). During the same 2-year period, 944,769 FAA physical examinations were performed, giving an annual denial rate per 1,000 applications of 4.8. In the previous study of CY 1977-78 applicants (4), the denial rate per 1,000 was 6.8 and the rate per 1,000 applications was 5.1.

B. Age Distribution of Denied Airmen

Table I shows that airmen applying for third-class certificates account for 71% of all denials, with second-class applicants accounting for 21% and first-class applicants only 7%. Table II reflects the age distribution and age-specific denial rates (also, see Figure 2) by class-applied-for.

Denial rates by class-applied-for also indicate that the highest crude rate for denials are applicants for third-class medical certification (general aviation/private or student airmen) with an annual denial rate of 8.6 per 1,000 active airmen. Occupationally connected airmen require first- and second-class medical certificates, and denial rates for these categories (3.3 and 3.8 per 1,000 active airmen respectively) are substantially lower than the general aviation (third-class) category or the total population denial rate (6.2 per 1,000). In the 1980 study (4), denial rates by class-applied-for were 8.9 for third class, 4.9 for second class, 4.3 for first class, and 6.8 for the total denial population.

Airmen may apply for and obtain any class of medical certificate for which they qualify; however, most new applicants apply for third-class medical certification consistent with their intended use of the certificate. First- and second-class medically certified airmen are most likely to be occupationally connected airmen, on either a full-time or part-time basis. As such, these airmen are, to some extent, medically purged, and denial rates for these two classes are more likely to reflect incidence rather than prevalence of disqualifying pathology among a more stable numerical group. Many applications for third-class certificates are from new applicants whose medical status has not been previously appraised by the FAA. Only 3% of all first-class examinations and 14% of all second-class examinations performed

are for new applicants. Therefore, the substantially higher denial rate for the third-class group more likely results from a combination of prevalence and incidence of disqualifying pathology than from any recognizable epidemiologic factor. New applicants account for approximately 20% of the total applicants for medical certification.

Also shown in Table I are the mean ages for the three class-applied-for denial groups and the three class-issued population groups. Third-class denied airmen were the oldest (denied airmen--47.0 years, active airmen--37.1 years); first-class airmen were next oldest (denied airmen--46.7 years, active airmen--37.5 years); and second-class airmen were the youngest (denied airmen--45.3 years, active airmen--37.3 years). The mean age for all denied applicants was 46.6 years, compared to a mean age of 37.2 years for the active airman population. Denied airmen's average age was 9½ years older than the active population airmen's average age.

Table II reflects similar age trends by class of medical certificate; however, age-specific rates were higher for second class over first class and third class over both first and second classes. Also observed are denial rates increasing as age increases.

C. Occupations of Denied Airmen

The majority of denied airmen are not occupationally connected to aviation (see Table III and Figure 3). Of all denied applicants, 90% indicated nonaeronautical occupations on their applications. These applicants yield an annual denial rate of 7.0 per 1,000 active airmen.

Of the applicants occupationally connected to aviation, the flight engineer category experienced the highest overall annual denial rate (6.0 per 1,000). Of these occupationally connected airmen, commercial pilots, self-employed; airline pilots; commercial pilots, not self-employed; aerial application pilots; and aircraft mechanics had the next highest rates (5.4, 4.0, 3.8, 3.2, 3.0 respectively). Only 3½% of the total denials were in the airline pilot occupation category. These findings are consistent with previous experience as to denial data by occupation (1-5).

D. Total Flying Time of Denied Airmen

Flying time data further emphasize the contribution of new applicants to total denials. Table IV shows total civilian flying time as recorded by the applicant on his/her denied application for medical certification. Over 38% of the denied airmen indicated less than 40 hours total flying time (the number of hours required for a private pilot's license). Of these airmen, 23% indicated no flying time, again showing that new applicants are the major contributor to total denials. The next largest percentage of denials occurs at the "more than 1,000 hours" interval (24.2%), followed by the "100-299 hours" interval (14.1%).

E. Medical Characteristics of Denied Airmen

Tables V and VI and Figure 4 provide annual cause-specific denial data, per 1,000 active airmen, by class of medical certificate applied for and sex. In Table V, one can again observe an increasing overall denial rate for third

class over second class and for second class over first class. The most significant causes for denial (regardless of class applied for) are cardiovascular (with an annual denial rate of 3.1 per 1,000 active airmen); the miscellaneous category, which includes endocrinopathies, general systemic conditions, use of disqualifying medications, and administrative denials for failure to provide additional medical information (with an annual denial rate of 2.8 per 1,000 applicants); and neuropsychiatric (with an annual denial rate of 1.2 per 1,000 applicants). Eye pathology is next in importance at a substantially lower rate. These findings are essentially the same as the findings in previous denial studies (1-5).

Use of disqualifying medication and administrative denials for failure to provide additional medical information represent a large portion of the denials in the miscellaneous pathology category. Of the 4,170 denials in this category, 2,402, or 58%, were for failure to provide additional medical information, and 1,169, or 28%, were for use of disqualifying medication.

The overall highest individual cause for denial was administrative denials for failure to provide additional information (miscellaneous pathology category); second was use of disqualifying medication (miscellaneous); third was hypertension with medication (cardiovascular); fourth was coronary artery bypass surgery (cardiovascular); fifth was myocardial infarction (cardiovascular); and, sixth was coronary artery disease (cardiovascular)(see Table VII and Figures 5 and 6).

As shown in Table VI, cause for denial by sex indicates that males were most frequently denied for cardiovascular reasons, second for miscellaneous causes, and third for neuropsychiatric reasons. Females, however, were most often denied for miscellaneous causes. The majority of denials in this category were for failure to provide additional information (63%) and for use of disqualifying medication (26%), followed by neuropsychiatric and then cardiovascular reasons. For all denied applicants, three pathology categories (cardiovascular, miscellaneous, and neuropsychiatric) account for more than 90% of all denials.

CONCLUSIONS

This study has provided comprehensive data reflecting pertinent denial rates with respect to the medical and general attributes of those airmen denied FAA medical certification. Future studies are planned to monitor any changes in the epidemiologic findings concerning denied airman applicants.

As of December 31, 1982 (the midpoint for the denied applicant group), there were 732,514 active certified airmen. In CY 1982 and 1983, 9,100 airman applicants were denied medical certification, resulting in an overall denial rate of 6.2 per 1,000 active airmen. By class of certificate applied for, the denial rates were 3.3, 3.8, and 8.6 per 1,000 for first, second, and third class respectively.

Age-specific denial rates increase slowly for the younger age intervals but begin a larger, steady increase at age interval 40-44. As expected, the mean age of the denied airman group was higher (by 9½ years) than the mean age of the active airman population group. However, the mean age of the

denied group appears to be rising by some 3 years over the previous study data (3) while the mean age of the active group remains essentially the same.

As anticipated, general aviation (third-class) applicants contributed greatly to total denials, reflecting again that new applicants are being screened for the first time. Ninety percent of all denied applicants indicated nonaeronautical occupations on their applications. Of the professional categories, the flight engineer and commercial pilot (self-employed) had the highest denial rates, with 6.0 and 5.4 per 1,000. Airline pilots were third highest of the occupationally connected airmen with a rate of 4.0 per 1,000 active airmen.

Total flying time data also substantiate the contribution of new applicants to total denials, with 39% of the denied applicants indicating less than 40 hours of total flying time and 23% indicating no flying time.

For denials by pathology, an increasing overall denial rate for third class over second class and for second class over first class was observed. The most significant causes for denial (regardless of class applied for) were cardiovascular, the miscellaneous pathology, and neuropsychiatric. These three categories are involved in 90% of all denials.

Cardiovascular diseases resulted in the highest denial rate for males, while the miscellaneous pathology category provided the highest denial rate for females, mainly contributed to by use of disqualifying medication and failure to provide additional information.

Overall, the highest individual cause for denial was administrative denials for failure to provide additional information; second was use of disqualifying medication; third through sixth were hypertension with medication, coronary artery bypass surgery, myocardial infarction, and coronary artery disease.

Epidemiologic findings are consistent with expectations and previous findings on denied airmen except that "failure to provide additional information" replaced "coronary artery disease" as the number one individual/specific cause for denial.

Table I
CY 1982 AND 1983 DENIED APPLICANTS BY AGE
AND CLASS OF MEDICAL CERTIFICATE APPLIED FOR

Age (years)	First Class	Second Class	Third Class	Total
Less than 20	11	50	174	235
20 - 24	32	140	323	495
25 - 29	25	163	437	625
30 - 34	34	159	516	709
35 - 39	52	181	570	803
40 - 44	84	189	572	845
45 - 49	122	217	687	1,026
50 - 54	122	215	943	1,280
55 - 59	128	277	919	1,324
60 - 64	49	229	723	1,001
65 - 69	9	79	403	491
70 and over	3	50	213	266
Total Denied	671	1,949	6,480	9,100
Percent of Total Denied	7.4	21.4	71.2	100.0
Total Active Airmen*	101,296	253,509	377,709	732,514
Annual Denial Rate per 1,000 Active Airmen	3.3	3.8	8.6	6.2
Mean Age of Denied Airmen**	46.7	45.3	47.0	46.6
Mean Age of Active Population Airmen***	37.5	37.3	37.1	37.2

*Examination Time Period Summary, RIS: AC 8065-4, December 31, 1982.

**Age as of the date of examination to last birthday.

***Age at last birthday as of December 1, 1982.

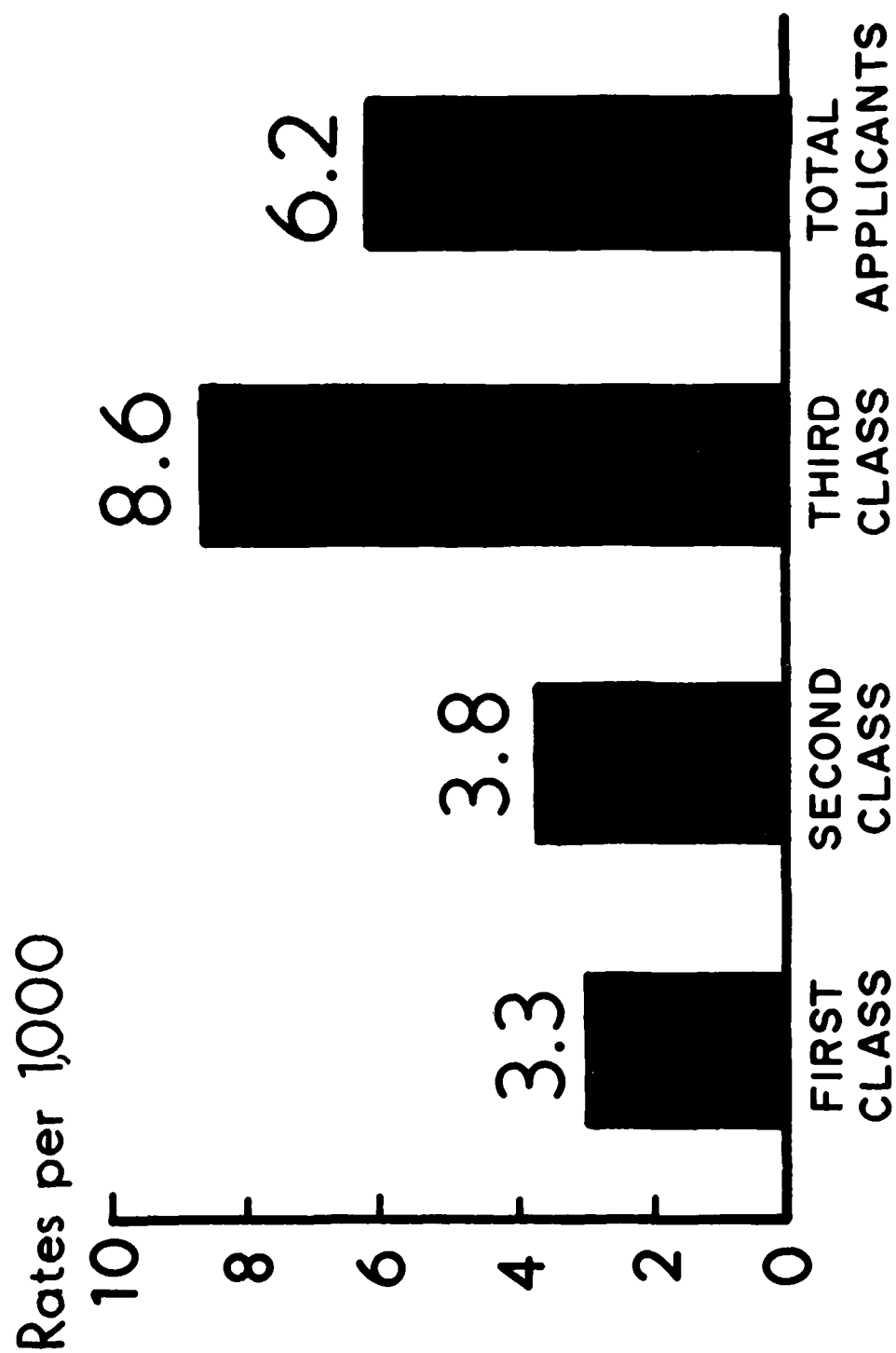


Figure 1. Annual denial rates by class.

Table II
AGE DISTRIBUTION COMPARISON--ACTIVE AIRMEN VS. CY 1982 AND 1983 DENIED APPLICANTS

Age Group ^a	First Class					Second Class					Third Class					Total				
	Denied Airmen	Active Airmen	Annual Age Specific		Denial Rate**	Denied Airmen	Active Airmen	Annual Age Specific		Denial Rate**	Denied Airmen	Active Airmen	Annual Age Specific		Denial Rate**	Denied Airmen	Active Airmen	Annual Age Specific		Denial Rate**
			Denial Rate**	Denial Rate**				Denial Rate**	Denial Rate**				Denial Rate**	Denial Rate**				Denial Rate**	Denial Rate**	
Less than 20	11	2,815	2.0			50		2.6			174	25,650	3.4			235	38,103	3.1		
20 - 24	32	9,665	1.7			140	30,283	2.3			323	45,879	3.5			495	85,827	2.9		
25 - 29	25	13,289	0.9			163	36,451	2.2			437	54,897	4.0			625	104,637	3.0		
30 - 34	34	17,860	1.0			159	40,111	2.0			516	54,034	4.8			709	112,005	3.2		
35 - 39	52	16,344	1.6			181	39,133	2.3			570	47,418	6.0			803	102,895	3.9		
40 - 44	84	14,544	2.9			189	28,741	3.3			572	38,382	7.5			845	81,667	5.2		
45 - 49	122	11,552	5.3			217	24,637	4.4			687	33,756	10.2			1,026	69,945	7.3		
50 - 54	122	7,005	8.7			215	17,694	6.1			943	33,483	14.1			1,280	58,182	11.0		
55 - 59	128	5,823	11.0			277	14,027	9.9			919	24,249	18.9			1,324	44,099	15.0		
60 - 64	49	1,958	12.5			229	9,013	12.7			723	12,663	28.5			1,001	23,634	21.2		
65 - 69	9	360	12.5			79	2,798	14.1			403	5,176	38.9			491	8,334	29.5		
70 and older	3	81	18.5			50	983	25.4			213	2,122	50.2			266	3,186	41.7		
TOTAL	671	101,296	3.3			1,949	253,509	3.8			6,480	377,709	8.6			9,100	732,514	6.2		

^aAge as of date of examination to last birthday for denied airmen; age at last birthday as of December 31, 1982, for active airmen.
^{**}per 1,000 active airmen.

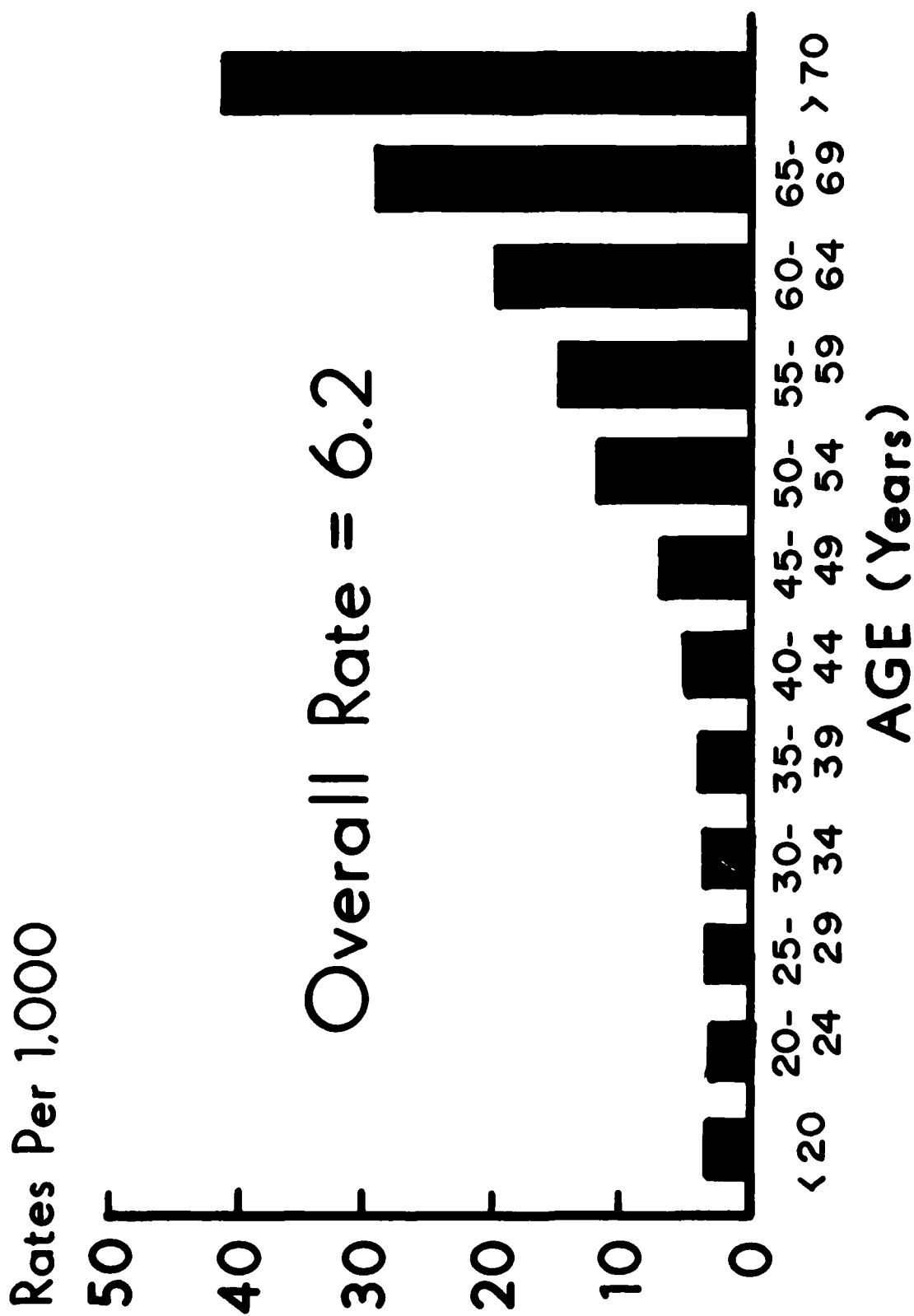
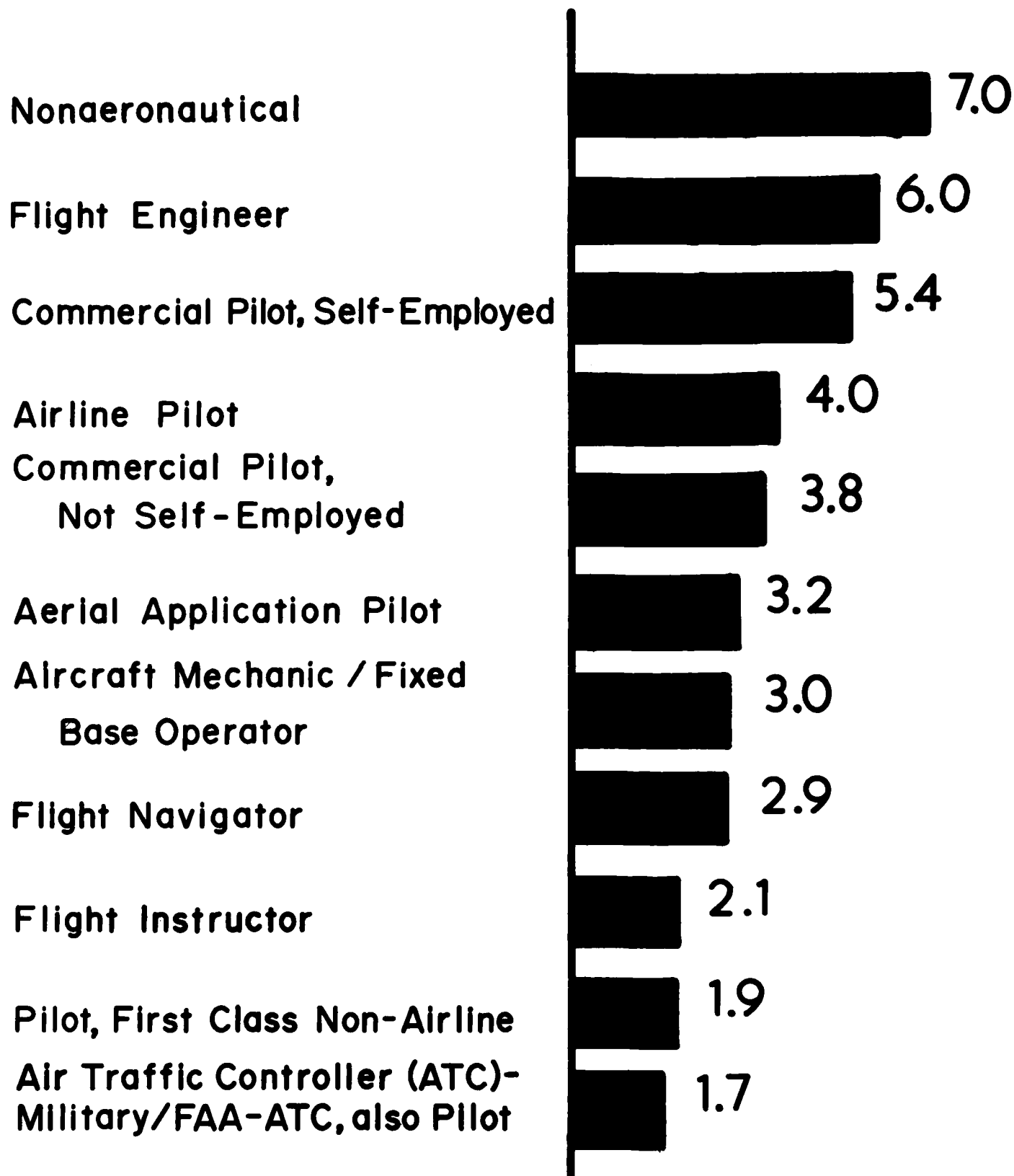


Figure 2. Age-specific denial rates.

Table III
CY 1982 AND 1983 DENIED APPLICANTS BY OCCUPATION AND CLASS OF MEDICAL CERTIFICATE APPLIED FOR*

Occupation	First Class	Second Class				Third Class Private	Third Class Student	Total Denied Airmen	Total Active Airmen**	Annual Rate per 1,000 Active Airmen
		Second Class ATC-Military and FAA	Second Class Engineer/Navigator	Second Class Commercial Pilot/ATC	Second Class Pvt. or Stu. Pilot/ATC					
Pilot, First-Class Airlines Only	336	-	-	-	-	-	-	336	41,823	4.0
Flight Engineer	12	2	65	-	-	-	-	79	6,591	6.0
Flight Navigator	-	2	-	-	-	-	-	2	340	2.9
Pilot, First-Class Non-Airlines	103	-	-	-	-	-	-	103	27,497	1.9
Commercial Pilot, Self-Employed	-	47	-	-	-	-	-	47	4,344	5.4
Commercial Pilot, Not Self-Employed	-	122	-	-	-	-	-	122	16,035	3.8
Aerial Application	1	25	-	-	-	-	-	26	4,032	3.2
Air Traffic Controller (ATC)-Military/FAA-ATC, Also Pilot	-	-	97	16	7	-	-	120	36,252	1.7
Flight Instructor	5	31	-	-	-	-	-	36	8,535	2.1
Aircraft Mechanic/Wired Base Operator	2	15	-	-	-	2	1	20	3,368	3.0
Nonaeronautical or Not Given	212	1,516	4	-	-	3,542	2,935	8,209	583,697	7.0
TOTAL	671	1,760	69	16	7	3,544	2,936	9,100	732,514	6.2

*Blocks 9A and B, FAA Form 8500-8, determine class applied for.
**As of December 31, 1982.



Annual Rates per 1,000

Figure 3. Denial rates by occupation.

Table IV
CY 1982 AND 1983 DENIED APPLICANTS
BY TOTAL RECORDED FLYING TIME

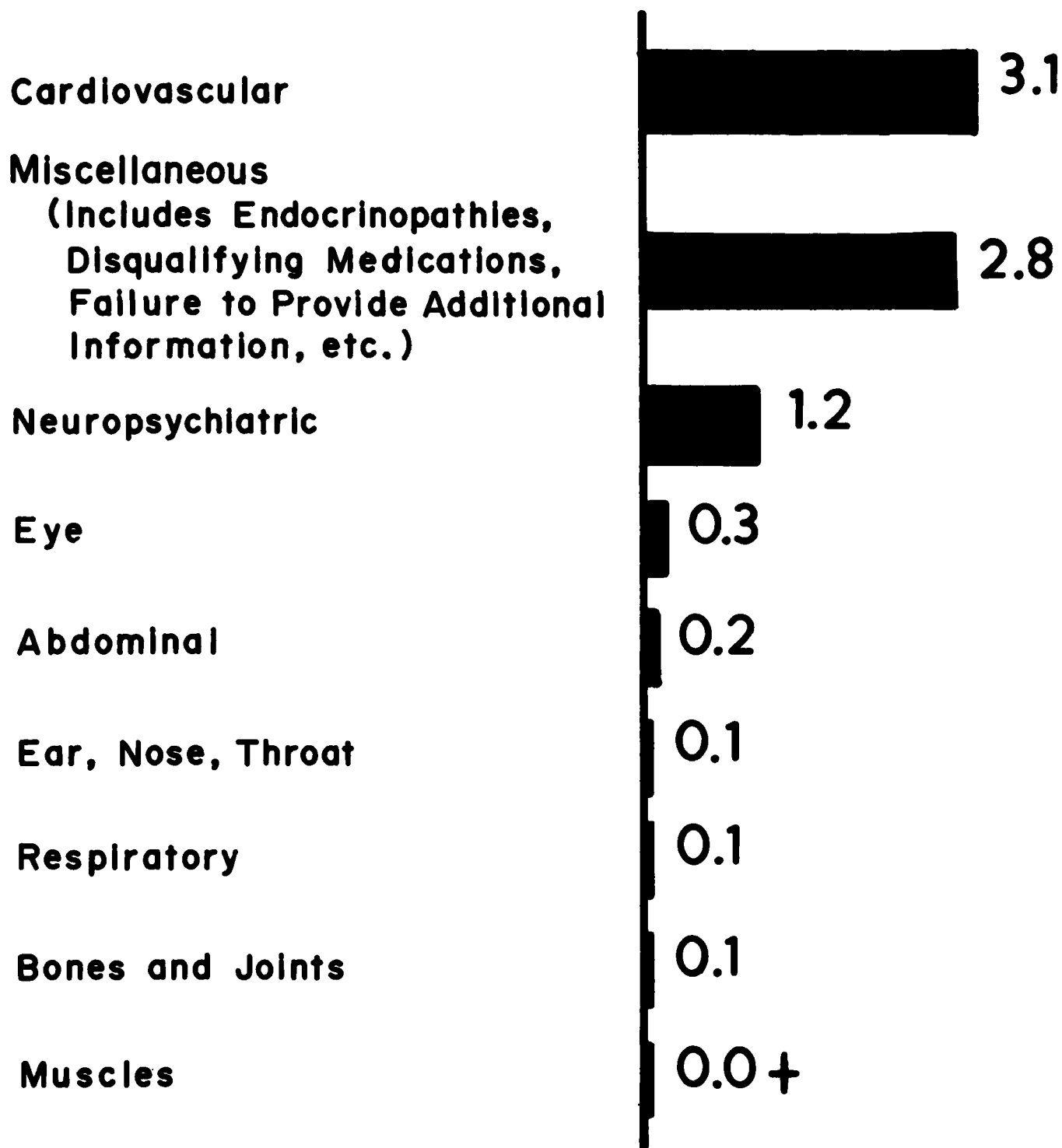
Total Flying Time* (Hours)	Number Denied	Percent of Total
0	2,085	22.9
1 - 10	780	8.6
11 - 20	382	4.2
21 - 40	268	2.9
Subtotal	3,515	38.6
41 - 99	493	5.4
100 - 299	1,278	14.1
300 - 499	671	7.4
500 - 1,000	940	10.3
More than 1,000	2,203	24.2
Subtotal	5,585	61.4
TOTAL	9,100	100.0

*The total civilian flying time recorded in Block 16, FAA Form 8500-8, determines total flying time.

Table V
CAUSE FOR DENIAL OF CY 1982 AND 1983 DENIED APPLICANTS BY PATHOLOGY SERIES AND
CLASS OF MEDICAL CERTIFICATE APPLIED FOR

Pathology Series	First Class		Second Class		Third Class		Total	
	Cause For Denial*	Annual Rate Per 1,000 Active Airmen	Cause For Denial*	Annual Rate Per 1,000 Active Airmen	Cause For Denial*	Annual Rate Per 1,000 Active Airmen	Cause For Denial*	Annual Rate Per 1,000 Active Airmen
Eye	42	0.2	112	0.2	341	0.5	495	0.3
Ear, Nose, Throat, and Mouth	31	0.2	19	0.0+	55	0.1	105	0.1
Respiratory	9	0.0+	26	0.1	66	0.1	101	0.1
Cardiovascular	328	1.6	792	1.6	3,426	4.5	4,546	3.1
Abdominal	21	0.1	58	0.1	235	0.3	314	0.2
Neuropsychiatric	201	1.0	368	0.7	1,183	1.6	1,752	1.2
Bones and Joints	26	0.1	21	0.1	41	0.1	88	0.1
Muscles	4	0.0+	9	0.0+	25	0.0+	38	0.0+
Miscellaneous (Disqualifying Medication, Endocrinopathies, etc.)	193	1.0	898	1.8	3,079	4.1	4,170	2.8
TOTAL	855	4.2	2,303	4.5	8,451	11.2	11,609	7.9

*Refers to distinct pathological conditions cited as cause for denial; does not represent airman applicants; however, most are denied for a single cause. Some applicants are denied for administrative reasons, e.g., failure to provide required ancillary or history data, may not have a specific pathology code assigned.



Annual Rates per 1,000

Figure 4. Cause for denial by major body system - annual rates.

Table VI
CY 1982 AND 1983 DENIED APPLICANTS BY PATHOLOGY SERIES AND SEX

Pathology Series	Male*		Female*	
	Cause For Denial**	Annual Rate per 1,000 Active Airmen	Cause For Denial**	Annual Rate per 1,000 Active Airmen
Eye	478	0.3	17	0.2
Ear, Nose, Throat, and Mouth	98	0.1	7	0.1
Respiratory	94	0.1	7	0.1
Cardiovascular	4,472	3.3	74	0.8
Abdominal	305	0.2	9	0.1
Neuropsychiatric	1,642	1.2	110	1.2
Bones and Joints	86	0.1	2	0.0+
Muscles	38	0.0+	-	-
Miscellaneous (Disqualifying Medication, Endocrinopathies, etc.)	3,951	2.9	219	2.4
TOTAL	11,164	8.1	445	4.9

*Active airman population by sex (male--687,374, female--45,140) as of December 31, 1982.

**Refers to distinct pathological conditions cited as cause for denial; does not represent airman applicants; however, most are denied for a single cause.

Table VII
THE MOST FREQUENTLY OCCURRING SPECIFIC CAUSES FOR DENIAL BY CLASS*
CY 1982 AND 1983 DENIED APPLICANTS

Cause	First Class	Percent	Second Class	Percent	Third Class	Percent	Total	Percent
Failure to Provide Additional Information	93	10.9	598	26.0	1,711	20.2	2,402	20.7
Use of Disqualifying Medication	55	6.4	183	8.0	931	11.0	1,169	10.1
Hypertension with Medication	50	5.8	117	5.1	629	7.4	796	6.9
Coronary Artery Bypass Surgery	51	6.0	131	5.7	602	7.1	784	6.8
Myocardial Infarction	60	7.0	125	5.4	572	6.8	757	6.5
Coronary Artery Disease	66	7.7	137	5.9	520	6.2	723	6.2
Alcohol Abuse	16	1.9	60	2.6	207	2.4	283	2.4
Neuroses	34	4.0	57	2.5	180	2.1	271	2.3
Other Heart Pathology	25	2.9	59	2.6	170	2.0	254	2.2
Convulsive Reactions	14	1.6	33	1.4	131	1.6	178	1.5
Defective Distant Vision	9	1.1	52	2.3	115	1.4	176	1.5
Disturbance of Consciousness	25	2.9	42	1.8	107	1.3	174	1.5
Diabetes Mellitus	10	1.2	40	1.7	115	1.4	165	1.4
Hypertension	11	1.3	26	1.1	126	1.5	163	1.4
Vascular-Brain (includes Aneurysms, Stroke, etc.)	11	1.3	39	1.7	111	1.3	161	1.4
All Other Causes	325	38.0	604	26.2	2,224	26.3	3,153	27.2
TOTAL	855	100.0	2,303	100.0	8,451	100.0	11,609	100.0

*These fifteen causes account for 73% of the total causes for denial. Refers to distinct pathological conditions cited as cause for denial; does not represent airman applicants.

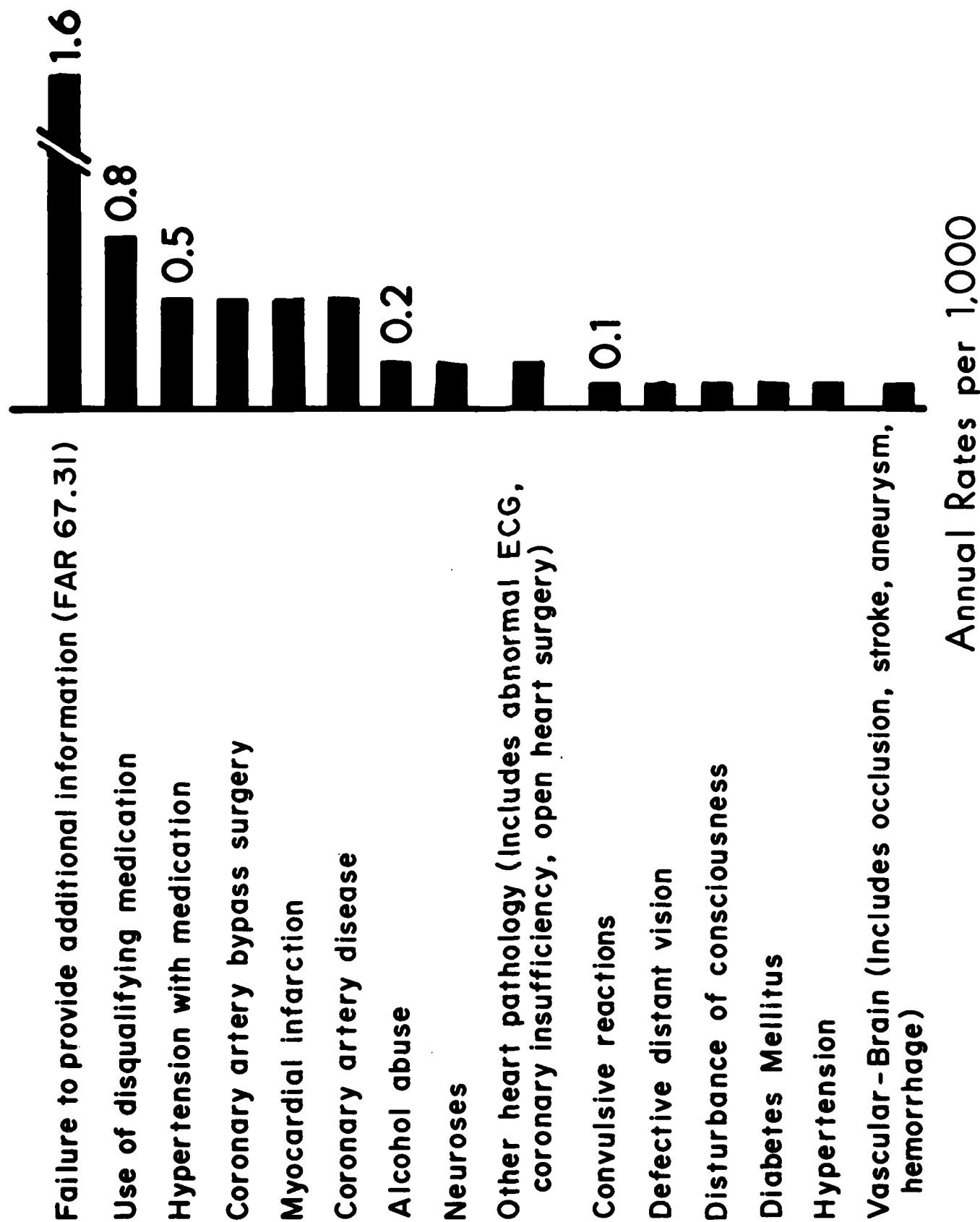
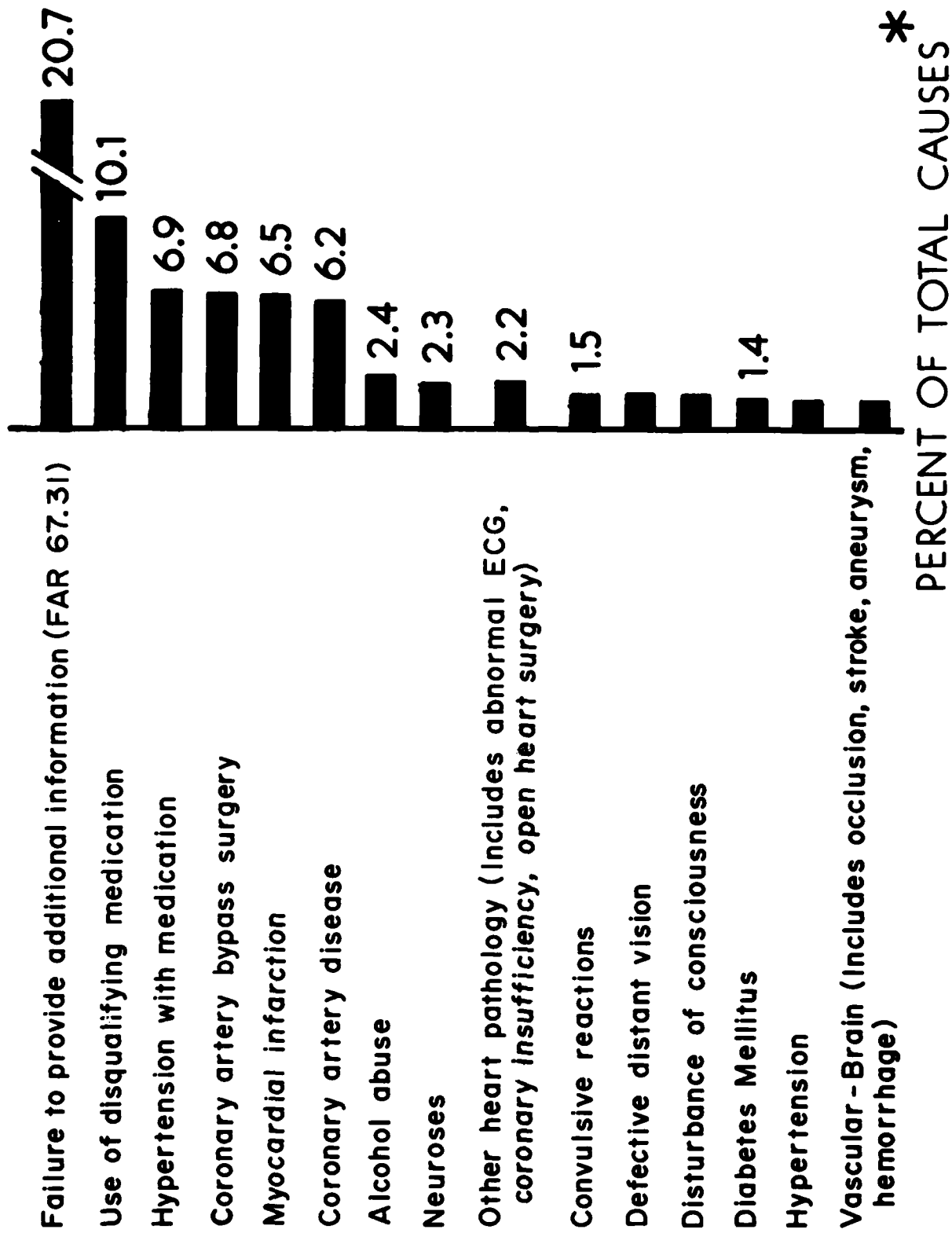


Figure 5. The most frequently occurring causes for denial - annual rates.



*73% of total causes for denial

Figure 6. The most frequently occurring causes for denial - percentage.

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